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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,037	06/24/2003	Cristian Petculescu	MSFT-1587/302202.1	1781
41505	7590	09/11/2006	EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			HWANG, JOON H	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/603,037

Applicant(s)

PETCULESCU ET AL.

Examiner

Joon H. Hwang

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8-11,13-16,18-24,26,27 and 29-48 is/are pending in the application.

4a) Of the above claim(s) 2 and 12 is/are ~~withdrawn from consideration~~  
Canceled.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-11,13-16,18-24,26,27 and 29-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The applicants amended claims 1, 11, and 32 and canceled claims 2 and 12 in the amendment received on 8/14/06.

The claims 1, 3-6, 8-11, 13-16, 18-24, 26-27, and 29-48 are pending.

### ***Response to Amendment***

2. The declaration filed on 8/14/06 under 37 CFR 1.131 has been considered but is ineffective to overcome the Malloy et al. (U.S. Publication No. 2004/0122844) reference.

3. The declaration establishes conception. However, the evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Malloy et al. (U.S. Publication No. 2004/0122844) reference to either a constructive reduction to practice or an actual reduction to practice.

According to MPEP 715.07(II), "*the actual dates of acts relied on to establish diligence **must** be provided*". However, no evidence of diligence is provided.

### ***Response to Arguments***

4. Applicant's arguments filed in the amendment received on 8/14/06 have been fully considered but they are not persuasive.

Since the applicants failed to provide evidence of diligence as discussed above in paragraph 3, the applicants' arguments are not persuasive.

***Claim Rejections - 35 USC § 102***

Art Unit: 2166

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 3-6, 8-11, 13-16, 18-24, 26-27, and 29-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Malloy et al. (U.S. Publication No. 2004/0122844).

With respect to claim 1, Malloy teaches defining a dimension comprising a plurality of attributes (i.e., a dimension metadata object is built on a plurality of attribute metadata objects, section 71 on page 4, section 74 on page 5, fig. 2, and fig. 4). Malloy teaches assigning each attribute to a respective column of the database (section 71 on page 4, section 74 on page 5, section 125 on page 9, fig. 2, and fig. 4). Malloy teaches defining relationships between the attributes (i.e., each dimension can have multiple hierarchies of attributes, sections 75-76 on page 5, section 86 on page 6, and sections 102 and 105-107 on page 7), wherein said relationships are not subject to restrictions placed on the database (i.e., an attribute order of a hierarchy can be varied, and the attribute order can be defined by the user, section 59 on page 3, sections 65 and 71 on page 4, section 74 on page 5, section 105 on page 7, section 111 on page 8, section 140 on page 11, section 275 on page 18, fig. 4, and fig. 15). Malloy teaches accessing the database via the dimension (i.e., a relational database is accessed via dimension, fig. 6, fig. 5, fig. 20, and section 178 on page 14).

With respect to claim 3, Malloy teaches defining at least one hierarchy comprising a sequence of the attributes (i.e., each dimension can have multiple

hierarchies of attributes, figs. 12-15, sections 75-76 on page 5, section 86 on page 6, and sections 102 and 105-108 on page 7).

With respect to claim 4, Malloy teaches each hierarchy defines a drill down path for accessing the database (fig. 20 and section 178 on page 14).

With respect to claim 5, Malloy teaches a hierarchy contains one attribute (fig. 20, sections 75-76 on page 5, and section 178 on page 14).

With respect to claim 6, Malloy teaches the act of defining the at least one hierarchy is independent of the database (i.e., an attribute order of a hierarchy can be varied, thus the attribute order can be arbitrarily defined, section 111 on page 8 and fig. 15).

With respect to claim 8, Malloy teaches the database is a relational database (i.e., a relational database 140 in fig. 1).

With respect to claim 9, Malloy teaches the dimension is utilized with an on line analysis processing (OLAP) system (i.e., OLAP 100 in fig. 1, section 4 on page 1, and section 59 on page 3).

With respect to claim 10, Malloy teaches an application programming interface (API) comprising means for performing the method of claim 1 (section 59 on page 3).

Claims 11, 13-16, and 18-19 are essentially the same as claims 1, 3-6, and 8-9 except that it sets forth the claimed invention as a computer-readable medium rather than a method and rejected for the same reasons as applied hereinabove.

Claims 20-24 and 26 are essentially the same as claims 1, 3-6 and 8-9 except that it sets forth the claimed invention as a system rather than a method, wherein for

claim 20, Malloy further teaches a processor coupled to a storage device, the storage device comprising a database (fig. 29, fig. 1, and section 303 on page 21), therefore, claims 20-24 and 26 are rejected for the same reasons as applied hereinabove.

Claims 27 and 29-31 are essentially the same as claims 1, 3, 6, and 9-10 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

The limitations of claims 32-39 are rejected in the analysis of claims 1, 3-6, and 8-9, and these claims are rejected on that basis, wherein for claim 37, Malloy further teaches the logical structure is defined independent of restrictions associated with the database (i.e., an attribute order of a hierarchy can be varied, thus the attribute order can be arbitrarily defined, section 111 on page 8 and fig. 15).

With respect to claim 40, the limitations of claim 40 are similar to the limitations of claim 1 above. Malloy further teaches receiving a data retrieval request including a dimension (i.e., a SQL query including a dimension for data retrieval, fig. 20, fig. 25, section 178 on page 14, and sections 253-272 on page 18). Therefore, the limitations of claim 40 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

With respect to claim 41, Malloy teaches providing the retrieved data in response to the data retrieval request (fig. 20, fig. 25, fig. 29, section 178 on page 14, and sections 253-272 on page 18).

With respect to claim 42, Malloy teaches the data retrieval request further including at least hierarchy comprising a sequence of the attributes (i.e., a drill up/down

operation request, fig. 20, fig. 25, section 178 on page 14, and sections 253-272 on page 18).

With respect to claim 43, Malloy teaches each hierarchy defines a drill down path for accessing the database (fig. 20 and section 178 on page 14).

With respect to claim 44, Malloy teaches a hierarchy contains one attribute (fig. 20, sections 75-76 on page 5, and section 178 on page 14).

With respect to claim 45, Malloy teaches each sequence is defined independent of restrictions associated with the database (i.e., an attribute order of a hierarchy can be varied, thus the attribute order can be arbitrarily defined, section 111 on page 8 and fig. 15).

With respect to claim 46, Malloy teaches the relationships between the attributes are defined independent of restrictions associated with the database (i.e., an attribute order of a hierarchy can be varied, thus the attribute order can be arbitrarily defined, section 111 on page 8 and fig. 15).

With respect to claim 47, Malloy teaches the database is a relational database (i.e., a relational database 140 in fig. 1).

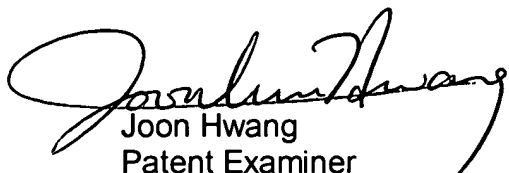
With respect to claim 48, Malloy teaches the database is capable of being utilized with an on line analysis processing (OLAP) system (i.e., OLAP 100 in fig. 1, section 4 on page 1, and section 59 on page 3).

Art Unit: 2166

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joon Hwang  
Patent Examiner  
Technology Center 2100

9/1/06